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Claims

- 1. A setting and curing accelerator for hydraulic binders, comprising:
- 5 Al₂(SO_4)₃ aluminum sulfate, Al(OH)₃ aluminum hydroxide and mineral acid in aqueous solution.
 - The setting and curing accelerator as claimed in claim 1,
- 10 characterized in that (in % by weight) the proportion of aluminum sulfate is 10-50% and/or the proportion of aluminum hydroxide is 5-30% and/or the proportion of mineral acid is 0.5-10%.
- 15 3. The setting and curing accelerator as claimed in claim 1 or 2, characterized in that (in % by weight) the proportion of aluminum sulfate is 30-50% and/or the proportion of aluminum hydroxide is 5-20%.
- 4. The setting and curing accelerator as claimed in claim 1, 2 or 3, characterized in that (in % by weight) the proportion of aluminum sulfate is 40-45% and/or the proportion of aluminum hydroxide is 10-17% and/or the proportion of mineral acid is 0.5-8%.
 - 5. The setting and curing accelerator as claimed in any of the preceding claims, characterized in that the mineral acid present
- 30 characterized in that the mineral acid present comprises (in % by weight) 1-5% of H_3PO_4 phosphoric acid and/or 0.5-3.0% of H_3BO_3 boric acid.
- 6. The setting and curing accelerator as claimed in any of the preceding claims, characterized in that (in % by weight) 0-10% of alkanolamine and/or 0-5.0% of fluidizer and/or 0-20% of stabilizer are present.

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- The setting and curing accelerator as claimed in 7. any of the preceding claims, characterized in that (in % by weight) 0-5% of alkanolamine and/or 0-10% of stabilizer and/or 0-3.0% of fluidizer are present.
- 8. The setting and curing accelerator as claimed in claim 6 or 7, characterized in that the alkanolamine 10 diethanolamine.
- 9. The setting and curing accelerator as claimed in claim 6 or 7, characterized in that the stabilizer is a silica 15 sol.
- The setting and curing accelerator as claimed in claim 6 or 7, characterized in that the fluidizer 20 polycarboxylate.
- 11. A process for producing a setting and curing accelerator, characterized in that a setting and 25 accelerator as claimed in any of claims 1 to 10 which is present in aqueous solution is dried, in particular by a spray drying process.
- The process for producing a setting and curing 30 accelerator as claimed in claim 11, characterized in that the dried mixture obtained is dissolved in water before addition to the hydraulic binder.
- 35 A process for producing a setting and curing 13. accelerator as claimed in any of claims 1 to 10, characterized in that in the production of the addition of the aqueous solution and the

components in the production of the solution, the solution is heated in a range from room temperature to 90°C .

- 5 14. The process for producing a setting and curing accelerator as claimed in claim 13, characterized in that the solution is heated to $50-80\,^{\circ}\text{C}$.
- 10 15. A method of accelerating the setting and curing of hydraulic binders and also mortar or concrete produced therefrom, characterized in that setting а and accelerator as claimed in any of claims 1 to 12 is 15 added in an amount of from 0.1 to 10% by weight to a mixture comprising hydraulic binders, with the percentages by weight being based on the weight of the hydraulic binder.
- 20 16. The use of the setting and curing accelerator as claimed in any of claims 1 to 12 in a spray concrete or spray mortar.